

Chapter 24

Text Pages 684–690

ENRICHMENT

● Evolution of Stars

Classifying Stars

Use the H-R diagram on page 684 of your textbook to classify each of the stars listed in the table as white dwarf, main sequence, giant, or supergiant stars. Also identify the color of the star based on its spectral class.

Spectral classifications	
Class	Color
O	blue
B	bluish-white
A	white
F	yellowish-white
G	yellow
K	orange
M	red

Star	Surface temperature, K	Absolute magnitude	Type of star	Spectral color
Hadar	21 000	-5		
Sirius A	10 400	+1.4		
Sirius B	10 700	+11.6		
Arcturus	4 500	-0.3		
Antares	2 900	-4.5		
Altair	8 000	+2.2		
Ross	2 800	+13.3		
Beta Pegasi	2 000	-1.4		
Capella	5 900	-0.7		
Van Maanen's	5 800	+10.4		
Bernard's	2 600	+13.2		
Pollux	4 100	+1.0		
Procyon	6 500	+2.8		
Betelgeuse	2 700	-5.6		
Mintaka	21 000	-5.1		